

ABSTRACT

A system and method for supplying power to a peripheral device where the voltage supplied by a host device may be the voltage required for operation of the peripheral, or a higher voltage. A memory system includes a voltage regulator including an input, and output and a bypass shorting the input to the output. A voltage detector communicates with the regulator. A Bypass enable signal operable responsive to a signal generated by the host device indicating that the power up of the host is complete is coupled to the bypass element. A method for operating a voltage regulator in a memory system includes the steps of: providing a voltage regulator having an input and an output, and including a bypass shorting the input to the output; setting the bypass to off prior to power up of a host device; responsive to a power up completion signal from a host device, determining the power supplied by the host; and if the power supplied by the host is below a threshold operating voltage, enabling the bypass.